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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/931,211	08/16/2001	Mathrubootham Janakiraman	212627	2348

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EXAMINER

NGUYEN, TRONG NHAN P

ART UNIT	PAPER NUMBER
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2152

DATE MAILED: 12/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/931,211	JANAKIRAMAN ET AL.	
	Examiner	Art Unit	
	Jack P Nguyen	2152	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of.
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| <p>1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)</p> <p>2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</p> <p>3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date <u>10/15/04</u></p> | <p>4) <input type="checkbox"/> Interview Summary (PTO-413)
 Paper No(s)/Mail Date _____</p> <p>5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)</p> <p>6) <input type="checkbox"/> Other: _____</p> |
|---|--|

DETAILED ACTION

Claims 1-18 are being examined.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 10 recites the limitation "...a client in addition to the participants..." in line

14. There is insufficient antecedent basis for this limitation in the claim. Claim fails to clearly define the difference between a client and participants in the system. All participants are clients of the system. Therefore, for the purpose of examination, examiner considers a client is another participant in the system.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaffer et al, 6,775,247 (Shaffer hereafter) in view of Sandvoss et al, 5,745,380 (Sandvoss hereafter).

As per claim 1, Shaffer teaches a computer-readable medium having computer-executable instructions for a bridge server (14, fig. 1; refers to as multimedia conference unit or 'MCU'; MCU is functionally equivalent to bridge server) in a multimedia

conference to select one video stream (from dominant communication unit or client) from video streams of multiple participants of the multimedia conference for forwarding to a client (abstract), the steps comprising: receiving multimedia conferencing data from the multiple participants, the multimedia conference data including the video streams of the participants (col. 1, lines 34-40; MCU receives and transmits multimedia data packets between plurality of clients {refers to as personal conferencing systems or 'PCS'}); monitoring participant events of the multimedia conference; updating conferencing activity states for each of the participants according to the participant events (col. 7, lines 27-31; MCU continuously monitors activity states of each participant to determine which user is dominant user); identifying a dominant participant among the participants; and selecting from the video streams of the participants one video stream corresponding to the identified participant having the dominant status for viewing by the client (col. 7, lines 34-39 & lines 43-48; after determining and selecting the dominant participant, the MCU receives and sends the dominant user's stream to other participants using multicasting and/or unicasting modes). Shaffer does not explicitly disclose periodically computing a weight for each of the participants based on the conferencing activity states of said each participant. However, in related art, Sandvoss discloses periodically computing a weight for each of the participants based on the conferencing activity states of said each participant (col. 3, lines 53-57; col. 5, lines 35-45; stream weights are computed for each participant based on their activity states, i.e., active streams have higher weights than passive streams [col. 5, lines 47-50]). Hence, it would have been obvious to one of ordinary skill in the art to be motivated to modify

and combine the teachings of Shaffer and Sandvoss in assigning weight values to activities in order to determine which participant is the most active in the multimedia conferencing system.

Claim 10 recites similar limitations to claim 1; therefore, it is rejected for similar reasons as claim 1 addressed above. Shaffer further teaches a plurality of participants each providing multimedia conferencing data including video signals and audio signals (col. 1, lines 34-36); a client in addition to the participants, the client capable of receiving a video stream corresponding to one of the participants at a time (col. 5, lines 33-39; a unicast client receives multimedia streams from only one (dominant) client at a time).

As per claims 2-3, Shaffer teaches multiple participants are connected to the bridge server through a multicast network (col. 3, lines 48-50); transmitting to the client an audio stream containing a mixture of audio signals from the multiple participants of the network conference (col. 5, lines 50-56; a client can select to receive multimedia signals from multiple participants to view).

As per claims 4-7, Shaffer does not explicitly disclose computing the weight includes determining whether said each participant is currently being shown to the client; length of time for which said each participant has been shown to the client if said each participant is currently being shown; computing the weight includes determining whether said each participant is talking. However, as previously stated in claim 1 above, Sandvoss teaches computing weights based on activities of the participants. Sandvoss further teaches computing weights include when the participant is talking and the length of time they are talking (or showing via multimedia conference) (col. 6, lines

1-5 & 10-13). Hence, it would have been obvious to one of ordinary in the art to be motivated to compute the weights using any criteria to determine the most dominant and active participant as disclosed by Sandvoss in [col. 6, lines 5-10].

As per claims 8 and 17, Shaffer teaches monitoring and updating the activity states of the participants (col. 7, lines 29-31). It is inherent that the activity values are stored and updated in a table to be accessed and used by the system to determine the dominant participant.

As per claims 9 and 18, Shaffer does not explicitly teach the multimedia conference streams include a combined video stream containing multiple substreams each corresponding to one of the multiple participants, and wherein the step of receiving includes demultiplexing the combined video stream into a plurality of individual video streams each including one of the substreams in the combined video stream. However, it is well known to one of ordinary skill in the art for a sender to use a multiplexer to combine and compress multiple substreams into one stream and a receiver to use a demultiplexer to decompress the stream into multiple substreams to save bandwidth and costs when sending the stream over the network.

Claims 11-12 are rejected for similar reasons as claims 2-3 addressed above.

Claims 13-16 are rejected for similar reasons as claims 4-7 addressed above.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Botzho et al, 5,983,192 ; Broussard et al, 6,317,776 ; Broussard, 6,269,483 ;
O'Neil, 5,963,547 ; Tai et al, 6,577,333 ; Gudjonsson et al, 6,564,261 ; Parry et
al, 6,603,501 ; Downs et al, 5,828,838

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jack P Nguyen whose telephone number is (571) 272-3945. The examiner can normally be reached on M-F 8:30-5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton Burgess can be reached on (571) 272-3949. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

jpn



Dung C. Dinh
Primary Examiner